The results of this work have been so convincing that the cultivation of disease-resistant strains of our crop plants promises to be the final method of eliminating disease.—J. M. C.

Ascospore expulsion of Endothia.—HEALD and STUDHALTER[27] have published the results of an investigation of the chestnut blight fungus, which uncovers a very interesting situation. There is a remarkably prolonged perithecial activity, due, partly at least, to three important features in the development of the fungus. The asci mature successively through quite an extended period, the perithecia mature successively in a given stroma, and the stromata mature successively throughout the season. The practical result is that ascospores are available for expulsion at any time when the conditions favor. Expulsion "begins in the spring with the first warm rains, and increases to a maximum of activity as conditions become more favorable, to be followed by a decline in the fall when lower temperatures prevail, and ceases entirely during the cooler portions of the year."—J. M. C.

Carpophores of pore fungi.—ZELLER[28] has studied the development of the carpophores of *Ceriomyces Zelleri*, one of the pore fungi. He discovers that in this development there is a homogenous mass of tissue which is differentiated simultaneously into pileus and stipe by a cleavage plane which gives rise to an annular furrow, and that the hymenium, which is exogenous in origin, is formed in the roof of a furrow. This form proves to be gymnocarpic, since there is no marginal veil.—J. M. C.

Morphology of Agaricus.—ATKINSON[29] has described in great detail the development of *Agaricus Rodmani*, a species described by PECK in 1885. The four features which he considers are (1) the duplex character of the annulus, (2) the origin of the hymenophore fundament, (3) the differentiation of parts in the primordial ground tissue, and (4) the origin and development of the lamellae. The paper must be referred to for the numerous details involved.—J. M. C.

New species of rust.—In working over cultures of rusts in connection with their presentation in the *North American Flora*, ARTHUR and FROMME[30] have discovered and described 7 new species in *Uromyces* (2), *Puccinia* (4), and *Uredo*.—J. M. C.

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[27] HEALD, F. D., and STUDHALTER, R. A., Seasonal duration of ascospore expulsion of *Endothia parasitica*. Amer. Jour. Bot. **2**:429–448. *figs. 6*. 1915.

[28] ZELLER, SANFORD M., The development of the carpophores of *Ceriomyces Zelleri*. Mycologia **6**:235–239. *pls. 140, 141. figs. 12*. 1914.

[29] ATKINSON, GEO. F., Morphology and development of *Agaricus Rodmani*. Proc. Amer. Phil. Soc. **54**:309–343. *pls. 7–13*. 1915.

[30] ARTHUR, J. C., and FROMME, F. D., New species of grass rusts. Torreya **15**: 260–265. 1915.